

IN THE CLAIMS

Below is a complete listing of the claims pending in this application:

Status of Claims:

1. (Currently Amended) A method for producing multifaceted graphitic nanotubes, which process comprises:

i) reacting a mixture of CH_4 and O_2 in the presence of a catalyst system comprised of a mixture of at least one Group VIII metal oxide and at least one

Group II metal oxide at effective temperatures to produce a mixture of CO and H_2 ; and

ii) reacting at least a portion of the mixture of CO and H_2 in the presence of a catalyst system comprised of a mixture of a Group VIII metal component selected from Co and Ni and Group II metal oxide at effective temperatures to grow multifaceted graphitic nanotubes therefrom, wherein said multifaceted graphitic nanotubes are comprised of platelets that are oriented substantially parallel to the growth axis of said nanotubes.

2. (Canceled)

3. (Previously Amended) The method of claim 1 wherein the Group VIII metal is Co .

4. (Original) The method of claim 1 wherein the mixture of CH_4 and O_2 is reacted at a temperature from about 350°C to about 1000°C .

5. (Original) The method of claim 4 wherein the mixture of CH_4 and O_2 is reacted at a temperature from about 450°C to about 1000°C .

6. (Original) The method of claim 1 wherein the temperature at which the graphitic nanotubes are grown is from about 550°C to about 700°C .

7. (Original) The method of claim 6 wherein the temperature at which the graphitic nanotubes are grown is from about 600°C to about 700°C .

8. (Currently Amended) A method for producing multifaceted graphitic nanotubes, which process comprises:

reacting at least a portion of mixture of CO and H₂ in the presence of a catalyst system comprised of a mixture of a Group VIII metal selected from Co and Ni and MgO at effective temperatures to grow multifaceted graphitic ~~nanofibers~~ nanotubes therefrom, thereby producing multifaceted graphitic nanotubes comprised of platelets that are oriented substantially parallel to the growth axis of said nanotubes.

9. (Canceled)

10. (Previously Amended) The method of claim 8 wherein the Group VIII metal is Co.

11. (Previously Amended) The method of claim 1 wherein the mixture of CH₄ and O₂ is reacted at a temperature from about 350°C to about 1000 °C.

12. (Previously Amended) The method of claim 1 wherein the mixture of CH₄ and O₂ is reacted at a temperature from about 450°C to about 1000°C.

13. (Original) The method of claim 8 wherein the temperature at which the graphitic nanotubes are grown is from about 550°C to about 670°C.

14. (Original) The method of claim 13 wherein the temperature at which the graphitic nanotubes are grown is from about 600°C to about 650°C.